

2 / Assoc. Power
E. Hillis
6-28-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Cohen et al. Examiner: Not yet assigned
Serial No.: Not yet assigned Group: Art Unit Not yet assigned
Filed: Concurrently herewith Docket: Y0999-573 (728-163)
Dated: January 21, 2000

For: DIFFUSION BARRIER LAYER AND SEMICONDUCTOR
DEVICE CONTAINING SAME

Assistant Commissioner for Patents
Washington, D.C. 20231

ASSOCIATE POWER OF ATTORNEY (37 C.F.R. §1.34)

Sir:

Please recognize the following Associate Attorneys and/or Agents in this
application:

PETER G. DILWORTH, Reg. No. 26,450; ROCCO S. BARRESE, Reg. No. 25,253;
DAVID M. CARTER, Reg. No. 30,949; PAUL J. FARRELL, Reg. No. 33,494;
PETER DELUCA, Reg. No. 32,978; JEFFREY S. STEEN, Reg. No. 32,063;
JOSEPH W. SCHMIDT, Reg. No. 36,920; RAYMOND E. FARRELL, Reg. No. 34,816;
ADRIAN T. CALDERONE, Reg. No. 31,746; GEORGE M. KAPLAN, Reg. No. 28,375;
RUSSELL R. KASSNER, Reg. No. 36,183; CHRISTOPHER G. TRAINOR, Reg. No. 39,517;
GEORGE LIKOUREZOS, Reg. No. 40,067; JAMES M. LOEFFLER, Reg. No. 37,873;
EDWARD C. MEAGHER, Reg. No. 41,189; SUSAN L. HESS, Reg. No. 37,350;
MICHAEL P. DILWORTH, Reg. No. 37,311; PETER B. SORELL, Reg. No. 44,349;
GLENN D. SMITH, Reg. No. 42,156; MICHAEL E. CARMEN, Reg. No. 43,533;
HAROLD G. FURLOW, Reg. No. 43,621; KEVIN C. ECKER, Reg. No. 43,600
THEODOSIOS THOMAS, Reg. No. 45,159; and DANIEL E. TIERNEY, Reg. No. 33,461,
each of them of DILWORTH & BARRESE, 333 Earle Ovington Boulevard, Uniondale,
New York 11553.

Respectfully submitted,

Date: 2-7-2000

By: 

Daniel P. Morris
Reg. No. 32,053
International Business Machines Corporation

COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,
DIVISIONAL, CONTINUATION OR CIP)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is of the following type: *(check one applicable item below)*

- ☒ original
☐ design
☐ supplemental

NOTE: If the declaration is for an International Application being filed as a divisional, continuation or continuation-in-part application do not check next item; check appropriate one of last three items.

- ☐ national stage of PCT

NOTE: If one of the following 3 items apply then complete and also attach ADDED PAGES FOR DIVISIONAL, CONTINUATION OR CIP.

- ☐ divisional
☐ continuation
☐ continuation-in-part (CIP)

INVENTORSHIP IDENTIFICATION

WARNING: If the inventors are each not the inventors of all the claims an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor *(if only one name is listed below)* or an original, first and joint inventor *(if plural names are listed below)* of the subject matter which is claimed and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

DIFFUSION BARRIER LAYER AND SEMICONDUCTOR DEVICE CONTAINING SAME

SPECIFICATION IDENTIFICATION

the specification of which: *(complete (a), (b) or (c))*

(a) ☒ is attached hereto.

(b) ☐ was filed on _____ as Serial No. _____ or Express Mail No., as Serial No. not yet known _____ and was amended on _____ *(if applicable)*.

NOTE: Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 C.F.R. 1.67.

(c) ☐ was described and claimed in PCT International Application No. _____ filed on _____ and as amended under PCT Article 19 on _____ *(if any)*.

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56.

☐ In compliance with this duty there is attached an information disclosure statement in accordance with 37 C.F.R. §1.98.

PRIORITY CLAIM (35 U.S.C. §119(a)-(d))

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

(d) ☒ no such applications have been filed.

(e) ☐ such applications have been filed as follows.

NOTE: Where item (c) is entered above and the International Application which designated the U.S. itself claimed priority check item (e), enter the details below and make the priority claim.

**A. PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION
AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. §119(a)-(d)**

COUNTRY (OR INDICATE IF PCT)	APPLICATION NUMBER	DATE OF FILING (<i>day, month, year</i>)	PRIORITY CLAIMED UNDER 35 U.S.C. 119
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)
(34 U.S.C. §119(e))**

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER

FILING DATE

**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

NOTE: If the application filed more than 12 months from the filing date of this application is a PCT filing forming the basis for this application entering the United States as (1) the national stage, or (2) a continuation, divisional, or continuation-in-part, then also complete ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR CIP APPLICATION for benefit of the prior U.S. or PCT application(s) under 35 U.S.C. §120.

POWER OF ATTORNEY

As a named inventor I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith as follows:

Manny W. Schechter (Reg. No. 31,722); Terry J. Ilardi (Reg. No. 29,936); Christopher A. Hughes (Reg. No. 26,914); Edward A. Pennington (Reg. No. 32,588); John E. Hoel (Reg. No. 26,279); Joseph C. Redmond, Jr. (Reg. No. 18,753); Kevin M. Jordan (Reg. No. 40,277); Stephen C. Kaufman (Reg. No. 29,551); Jay. P. Sbrollini (Reg. No. 36,266); David M. Shofi (Reg. No. 39,835); Robert M. Trepp (Reg. No. 25,933); Louis P. Herzberg (Reg. No. 41,500); Daniel P. Morris (Reg. No. 32,053); Paul J. Otterstedt (Reg. No. 37,411); Louis J. Percello (Reg. No. 33,206); and Douglas W. Cameron (Reg. No. 31,596).

SEND CORRESPONDENCE TO:

DIRECT TELEPHONE CALLS TO:
(Name and telephone number)

Rocco S. Barrese, Esq.
DILWORTH & BARRESE
333 Earle Ovington Boulevard
Uniondale, New York 11553

Rocco S. Barrese
(516) 228-8484

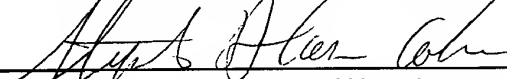
DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


SIGNATURE(S)

NOTE: Carefully indicate the family (or last) name as it should appear on the filing receipt and all other documents.


Full name of **sole or first inventor** Stephan Alan COHEN

Inventor's signature  Date 1/24/00
Country of Citizenship USA Residence Wappingers Falls, New York
Post Office Address 12 Sabra Lane, Wappingers Falls, New York 12590


Full name of **second joint inventor** Timothy Joseph DALTON

Inventor's signature  Date 1/26/00
Country of Citizenship USA Residence Ridgefield, Connecticut
Post Office Address 72 Sarah Bishop Road, Ridgefield, Connecticut 06877-1215

Full name of **third joint inventor** John Anthony FITZSIMMONS

Inventor's signature  Date 1/26/00
Country of Citizenship USA Residence Poughkeepsie, New York
Post Office Address 51 Skyview Drive, Poughkeepsie, New York 12603

Full name of **fourth joint inventor** Stephen McConnell GATES

Inventor's signature  Date 1/24/00
Country of Citizenship USA Residence Ossining, New York
Post Office Address 22 Inningwood Road, Ossining, New York 10562

**CHECK PROPER BOX(ES) FOR ANY OF THE FOLLOWING
ADDED PAGE(S) WHICH FORM A PART OF THIS DECLARATION**

- ☒ Signature for subsequent joint inventors.
Number of pages added 2.
- ☐ Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor.
Number of pages added _____.
- ☐ Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 C.F.R. §1.47.
Number of pages added _____.

- ☐ Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (CIP) application.
Number of pages added _____.

- ☐ Authorization of attorney(s) to accept and follow instructions from representative.

If no further pages form a part of this Declaration then end this Declaration with this page and check the following item.

- ☐ This declaration ends with this page.

**ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY
FOR SIGNATURE BY FIFTH AND SUBSEQUENT INVENTORS**

Full name of **fifth joint inventor** Lynne M. GIGNAC

Inventor's signature Lynne M. Gignac Date 1/24/2000
Country of Citizenship USA Residence Beacon, New York
Post Office Address 1 Falconer Street, Beacon, New York 12508

Full name of **sixth joint inventor** Paul Charles JAMISON

Inventor's signature Paul Charles Jamison Date 1/26/2000
Country of Citizenship USA Residence Hopewell Junction, New York
Post Office Address 5 Ridge Road, Hopewell Junction, New York 12533

Full name of **seventh joint inventor** Kang-Wook LEE

Inventor's signature Kang Wook Lee Date 1/24/00
Country of Citizenship Republic of Korea Residence Yorktown Heights, New York
Post Office Address 393 Chestnut Court, Yorktown Heights, New York 10598

Full name of **eighth joint inventor** Sampath PURUSHOTHAMAN

Inventor's signature Sampath Purushothaman Date 1/24/2000
Country of Citizenship USA Residence Yorktown Heights, New York
Post Office Address 2075 Lavoie Court, Yorktown Heights, New York 10598

Full name of **ninth joint inventor** Darryl D. RESTAINO

Inventor's signature Darryl D. Restaino Date 1/26/2000
Country of Citizenship USA Residence Modena, New York
Post Office Address 14 Susi Oval, Modena, New York 12548

Full name of **tenth joint inventor** Eva SIMONYI

Inventor's signature *Eva Simonyi* Date 1/24/00

Country of Citizenship USA Residence Bronx, New York

Post Office Address 3400 Fort Independence Street, Apt. 9A, Bronx, New York 10463

Full name of **eleventh joint inventor** Horatio Seymour WILDMAN

Inventor's signature *Horatio S. Wildman* Date 1/27/00

Country of Citizenship USA Residence Wappingers Falls, New York

Post Office Address 11 Central Avenue, Wappingers Falls, New York 12590

U.S. DEPARTMENT OF COMMERCE
BUREAU OF PATENT AND TRADEMARKS
WASHINGTON, D.C. 20530